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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/079,692	02/20/2002	William D. Hays JR.	60,130-817; 00MRA0208/022	7399
26096	7590	10/02/2003	EXAMINER	
CARLSON, GASKEY & OLDS, P.C. 400 WEST MAPLE ROAD SUITE 350 BIRMINGHAM, MI 48009			KRAMER, DEVON C	
			ART UNIT	PAPER NUMBER
			3683	

DATE MAILED: 10/02/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/079,692

Applicant(s)

HAYS ET AL.

Examiner

Devon C Kramer

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 04 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) 10-17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 18-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

*Devon C Kramer*  
9-24-03

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1) The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2) Claims 1-2, and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Grimme et al (DE 29821482).

Please note that Grimme et al (US 6267206) is an equivalent to the German application.

In reference to claim 1, Grimme et al teaches a brake plate (10) comprising a non-metallic body (see abstract).

In reference to claim 2, Grimme et al teaches an arrangement where the plate is a backing plate and includes a friction pad supported on one surface of the body. (Figure 1)

In reference to claim 18, Grimme et al teaches the use of a thermosetting resin. (Col. 2 lines 36-40)

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3) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4) Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Grimme et al (DE 29821482) in view of Stahl (4552252).

Grimme et al lacks the teaching of applying the friction lining with adhesive.

Stahl teaches applying a friction lining to a backing plate using an adhesive. (Col. 3 lines 15-30).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have connected the plate and pad of Grimme et al with adhesive as taught by Stahl merely because adhesive is a commonly known way to attach the two parts together.

6) Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Grimme et al (DE 29821482) in view of Kwolek (5515950).

Grimme et al lacks the teaching of riveting the friction pad to the plate.

Kwolek teaches riveting the friction pad to the plate.

It would have been obvious to one of ordinary skill in the art at the time of the invention to have provided the pad assembly of Grimme et al with riveting as taught by Kwolek merely because riveting is a known alternate means used in the art to secure a brake pad to a backing plate.

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7) Claims 5 and 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grimme et al (DE 29821482) in view of Strasser et al (6062351).

Grimme et al lacks the teaching of integrally molding the backing plate and the pad.

Strasser et al teaches integrally molding a portion of the backing plate and the friction pad, with the surface having a plurality of projections (46).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have provided the pad assembly of Grimme et al with the molding as taught by Strasser merely because molding is a known alternate means used in the art to secure a brake pad to a backing plate.

8) Claims 6, 8, 23-24 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grimme et al (DE 29821482) in view of Kearsey (5585166).

Grimme et al provides a body 20 having a friction surface (20a) that is the same material as the body. Grimme et al teaches a phenolic matrix material used in the body (Please see the US equivalent col. 2 lines 36-40) Grimme et al is silent to using his pad in a wet disc brake assembly.

Kearsey teaches the use of a friction material in a wet disc assembly.

It would have been obvious to one of ordinary skill in the art at the time of the invention to have provided the pad of Grimme et al in a wet disc brake as taught by Kearsey merely because it is an alternate environment where friction pads are known to be used.

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9) Claims 7 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grimme et al (DE 29821482) in view of Kearsey (5585166) as applied to claim 6 and 24 above and further in view of Ohya et al (4944373).

Both Grimme et al and Kearsey lack the teaching of a fiber reinforced phenolic material.

Ohya et al teaches the use of a fiber-reinforced material for a backing plate. (Col. 7 lines 47-50)

It would have been obvious to one of ordinary skill in the art at the time of the invention to have provided the pad assembly of Grimme et al as modified by Kearsey with a fiber reinforced material as taught by Ohya et al in order to add further durability and strength to the pad assembly.

10) Claims 9 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grimme et al (DE 29821482) in view of Ohya et al (4944373).

Grimme et al lacks the teaching of a fiber reinforced phenolic material.

Ohya et al teaches the use of a fiber-reinforced material for a backing plate. (Col. 7 lines 47-50)

It would have been obvious to one of ordinary skill in the art at the time of the modified by Kearsey with a fiber reinforced material as taught by Ohya et al in order to add further durability and strength to the pad assembly.

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11) Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Grimme et al (DE 29821482) in view of Strasser et al (6062351) as applied to claim 24 above and further in view of Lam (6182804).

Both Grimme et al and Strasser et al lack the teaching of a body and a friction surface comprising a fiber reinforced phenolic material.

Lam teaches a friction material formed of a fiber reinforced phenolic material. (Abstract)

It would have been obvious to one of ordinary skill in the art at the time of the invention to have provided the body and friction lining of Grimme et al as modified by Strasser with a fiber reinforced phenolic material as taught by Lam merely because it is a known tribologic material that has good friction and wear characteristics.

### *Conclusion*

12) The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Yamashita teaches an arrangement where the pad and plate are made of the same material.

13) Any inquiry concerning this communication or earlier communications from the examiner should be directed to Devon C Kramer whose telephone number is 703-305-0839. The examiner can normally be reached on Mon-Fri 8-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Lavinder can be reached on 703-308-3421. The fax phone numbers for the

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organization where this application or proceeding is assigned are 703-308-3519 for regular communications and 703-308-3519 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1134.

DK

September 24, 2003

*Devon*  
*9-24-03*